CLAIMS:

1. A hybrid MOS-bipolar device comprising a trench MOS device having at least source, gate, drain and body regions, the gate and base being shorted together and biased positively relative to the drain.

2. The hybrid MOS-bipolar device of claim 1wherein said gate has a single oxide thickness of under 600A.

3. The hybrid MOS-bipolar device of claim 1 wherein said gate has a multiple oxide thickness for formation of gate and field-oxide regions.

4. The hybrid MOS-bipolar device of claim 2 having a square trench geometry.

5. The hybrid MOS-bipolar device of claim 2 having a circular geometry.

6. A method of implementing a hybrid MOS-bipolar device having a source, body and gate, comprising shorting together body and gate of a trench MOS device and positively biasing the an electrode connected to the shorted body and gate.

7. The method of claim 6 wherein the gate oxide thickness varies along the length thereof.

8. The method of claim 7 wherein the gate oxide thickness varies by having two substantially discrete levels of thickness.

9. The method of claim 8 wherein said device has a PI region and an Ndrift region, and wherein a first gate oxide thickness is fabricated adjacent said PI region and a second and thicker gate oxide thickness is fabricated adjacent said Ndrift region.

10. A hybrid MOS-bipolar device comprising a PI region, an Ndrift region, a body, gate, drain and source, said device being configured with its base and gate shorted together, said device having a gate oxide thickness of a first value adjacent said PI region, and a gate oxide thickness of a second value adjacent said Ndrift region.

11. The hybrid MOS bipolar device of claim 10, wherein said gate and said body are positively biased.

12. A method of making a hybrid MOS-bipolar device comprising doping a PI region to optimize said region for said MOS device, and fabricating a gate electrode from to optimize a bipolar component of said hybrid MOS-bipolar device.

13. The method of claim 12 further comprising making a gate oxide thickness that varies along the length thereof.

14. The method of claim 13 wherein said gate oxide thickness is greater in a region adjacent said PI region than it is adjacent said Ndrift region.

15. The method of claim 14 wherein said device is constructed using a double metal process flow.

16. A hybrid bipolar-MOS device having a first region serving as a source and emitter, a second region serving as a body and a base, and a third region serving as a gate and base, the gate and base being shorted together and positively biased.

17. The hybrid bipolar-MOS device of claim 16 having a fourth region that serves as both a drain and a collector.

18. The hybrid bipolar-MOS device of claim 17 having a breakdown voltage of approximately 200 volts.

19. The hybrid bipolar-MOS device of claim 17 having a single gate oxide thickness of approximately 380-600 Angstoms.

20. The hybrid bipolar-MOS device of claim 17 having plural gate oxide thicknesses.

21. The hybrid MOS-bipolar device of claim 2 having a stripe geometry.